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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/089,190

03/27/2002

Olli Kirla

P 290761

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10/06/2004

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EXAMINER

RAMPURIA, SHARAD K

ART UNIT

PAPER NUMBER

2683

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/089,190	Applicant(s) KIRLA, OLLI	
	Examiner Sharad Rampuria	Art Unit 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

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Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/27/02</u> | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-2, 5-7 & 10-13 are rejected under 35 U.S.C. 102 (e) as being anticipated by Galyas et al. (US 6138020) (hereinafter Galyas).

1. Regarding claim 1, Galyas disclose a method for performing a handover where a telecommunications channel used by a connection between a mobile station and a mobile services switching center is changed in a mobile communications system where the telecommunications channel consists of a radio channel connecting the mobile station and a base station and of a channel connecting the base station and the mobile services switching center, (abstract, col.6; 35-45, col.7; 50-55) wherein the method comprises selecting a new radio channel for the connection in question;

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checking whether the handover is an internal handover of the base station controller where the base station employing the new radio channel and the base station employing the old radio channel are controlled by one and the same base station controller, (col.15; 23-32)

checking whether a predetermined trigger condition is met, said condition being met if either the speech coding method or the data transfer rate changes, or if they both change at the same time, in connection with the handover; (col.15; 13-22) and

directing a switching function located in the mobile services switching center to perform the handover, provided that the checks show that the handover is an internal handover of the base station controller where the trigger condition is met. (col.15; 1-12)

2. Regarding claim 2, Galyas disclose a method according to claim 1, wherein the switching function of the base station controller is directed to perform the handover in question, provided that the checks show that the handover is an internal handover of the base station controller where the trigger condition is not met. (col.15; 23-32)

5. Regarding claim 5, Galyas disclose a method according to claim 1, wherein the process for directing the switching function of the mobile services switching center to perform the handover comprises the following:

a first step where the switching function starts to branch telecommunications signals to be sent in the downlink direction to the mobile station such that the signals are supplied from the switching function further to both the base station that employs the old radio channel and the base station employing the new radio channel, and to sum the telecommunications signals transmitted in the

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uplink direction by the base station employing the old radio channel and the base station employing the new radio channel, and to forward the summed signals; and
a second step where the switching function interrupts the supply of signals in both the uplink and downlink directions between the mobile services switching center and the base station employing the old radio channel. (col.8; 56-col.9; 65)

6. Regarding claim 6, Galyas disclose a mobile communications system (abstract) comprising a mobile services switching center; (MSC; fig.2)
a mobile station having a connection to the mobile services switching center over a first telecommunications channel, (col.14; 58-67) and
control means for directing a handover to replace the first telecommunications channel used for the connection between the mobile station and the mobile services switching center with a second telecommunications channel, (col.15; 1-12)
wherein the system further comprises
comparison means comparing the speech coding method and the data transfer rate used on the first telecommunications channel with one or more speech coding methods and data transfer rates available on the second telecommunications channel in order to find out whether a predetermined trigger condition is met, said condition being met if the speech coding method used on the first telecommunications channel is not available on the second telecommunications channel and/or if the data transfer rate of the second telecommunications channel is different from the data transfer rate of the first telecommunications channel; (col.14; 58-col.15; 22)

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checking means checking whether the handover is an internal handover of a base station controller where the base station transmitting the first telecommunications channel is controlled by the same base station controller as the base station transmitting the second telecommunications channel (col.15; 23-32) and that the control means direct the switching function of the mobile service switching center to perform the handover, provided that the comparison means and the checking means show that the handover is an internal handover of the base station controller where the trigger condition is met. (col.15; 1-12)

7. Regarding claim 7, Galyas disclose a mobile communications system according to claim 6, wherein the control means direct the switching function of the base station controller to perform the handover, provided that the comparison means and the checking means show that the handover is an internal handover of the base station controller where the trigger condition is not met. (col.15; 23-32)

10. Regarding claim 10, Galyas disclose a mobile communications system according to claim 6, wherein said base station transmitting the first telecommunications channel and said base station transmitting the second telecommunications channel are one and the same base station. (col.15; 23-32)

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11. Regarding claim 11, Galyas disclose a mobile communications system according to claim 6, wherein said base station transmitting the first telecommunications channel and said base station transmitting the second telecommunications channel are different base stations. (col.14; 58-67)

12. Regarding claim 12, Galyas disclose a mobile communications system according to claim 6, wherein the mobile communication system is a digital mobile communication system in which the mobile station and the mobile services switching center employ different speech coding methods and that the first and the second telecommunications channels are provided with speech processing units which perform the coding and decoding operations needed for supplying speech signals between the mobile station and the mobile services switching center. (col.6; 35-45)

13. Regarding claim 13, Galyas disclose a base station controller (BSC; fig.2) comprising control means for directing a handover to replace a first telecommunications channel used for a connection between a mobile station and a mobile services switching center with a second telecommunications channel, (abstract) wherein the base station controller further comprises comparison means for comparing the speech coding method and the data transfer rate used by the mobile station on the first telecommunications channel with one or more speech coding methods available on the second telecommunications channel and with the data transfers rate available on the second telecommunications channel in order to find out whether a predetermined trigger condition is met, said condition being met if the speech coding method used on the first telecommunications channel is not available on the second telecommunications

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channel and/or if the data transfer rate of the second telecommunications channel is different from that used on the first telecommunications channel; (col.14; 58-col.15; 22)

checking means checking whether the handover in question is an internal handover of a base station controller where the base station transmitting the first telecommunications channel and the base station transmitting the second telecommunications channel are controlled by the base station controller in question; (col.15; 23-32) and that

the control means direct the switching function of the mobile services switching center to perform the handover, provided that the comparison means and the checking means show that the handover is an internal handover of the base station controller and that the trigger condition is met. (col.15; 1-21)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4, & 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galyas in view of Saada et al. [US 6493555] (hereinafter Saada).

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3. Regarding claim 3, Galyas disclose all the particulars of the claim except the process where the switching function of the mobile services switching center or the base station controller is directed to perform the handover. However, Saada teaches in an analogous art, that a method according to claim 1, wherein the process where the switching function of the mobile services switching center or the base station controller is directed to perform the handover comprises the following:

a first step where the switching function starts to branch telecommunications signals sent by the mobile services switching center in the downlink direction to the mobile station such that the signals in question are supplied from the switching function further to both the base station employing the old radio channel and to the base station employing the new radio channel; (col.5; 28-col.6; 47)

a second step where the switching function interrupts the supply of telecommunications signals transmitted from the base station employing the old radio channel in the uplink direction and starts the to supply in the uplink direction telecommunications signals received from the mobile station by the base station employing the new radio channel; (col.5; 28-col.6; 47) and

a third step where the switching function interrupts the supply of telecommunications signals, sent to the mobile station by the mobile services switching center, in the downlink direction to the base station employing the old radio channel. (col.5; 28-col.6; 47) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the process where the switching function of the mobile services switching center or the base station controller is directed to perform the handover in order to provide managing radio resources in inter-cell call handover system.

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4. Regarding claim 4, Galyas disclose all the particulars of the claim except the first step is entered when a radio channel has been activated for the connection in question at the base station employing the new radio channel, the second step is entered when the base station employing the new radio channel detects that the mobile station has tuned to the new radio channel; and the third step is entered when the mobile station confirms that it has started to use the new radio channel. However, Saada teaches in an analogous art, that a method according to claim 3, wherein the first step is entered when a radio channel has been activated for the connection in question at the base station employing the new radio channel, the second step is entered when the base station employing the new radio channel detects that the mobile station has tuned to the new radio channel; and the third step is entered when the mobile station confirms that it has started to use the new radio channel. (col.5; 28-col.6; 47) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the first step is entered when a radio channel has been activated for the connection in question at the base station employing the new radio channel, the second step is entered when the base station employing the new radio channel detects that the mobile station has tuned to the new radio channel; and the third step is entered when the mobile station confirms that it has started to use the new radio channel in order to provide managing radio resources in inter-cell call handover system.

8. Regarding claim 8, Galyas disclose all the particulars of the claim except the process where the switching function of the mobile services switching center or the base station controller is directed to perform the handover. However, Saada teaches in an analogous art, a mobile

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communication system according to claim 6, wherein the switching functions of the base station controller and the mobile services switching center can be directed at least to

a first state where the switching function branches telecommunications signals to be sent to the mobile station in the downlink direction to the base station transmitting the first

telecommunications channel and the base station transmitting the second telecommunications channel and where the switching function supplies only signals received from the mobile station by the base station transmitting the first telecommunications channel in the uplink direction to the mobile services switching center; (col.5; 28-col.6; 47)

a second state where the switching function branches telecommunications signals to be sent to the mobile station in the downlink direction to the base station transmitting the first telecommunications channel and the base station transmitting the second telecommunications channel and where the switching function supplies only signals received from the mobile station by the base station transmitting the second telecommunications channel in the uplink direction to the mobile services switching center; (col.5; 28-col.6; 47) and

a third state where the switching function supplies telecommunications signals to be sent to the mobile station in the downlink direction only to the base station transmitting the second telecommunications channel and where the switching function supplies only signals received from the mobile station by the base station transmitting the second telecommunications channel in the uplink direction to the mobile services switching center; (col.5; 28-col.6; 47) and

that the control means direct the switching function to perform the handover in such a way that the switching function goes through the three states. (col.5; 28-col.6; 47) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the

process where the switching function of the mobile services switching center or the base station controller is directed to perform the handover in order to provide managing radio resources in inter-cell call handover system.

9. Regarding claim 9, Galyas disclose all the particulars of the claim except the first step is entered when a radio channel has been activated for the connection in question at the base station employing the new radio channel, the second step is entered when the base station employing the new radio channel detects that the mobile station has tuned to the new radio channel; and the third step is entered when the mobile station confirms that it has started to use the new radio channel. However, Saada teaches in an analogous art, that a mobile communications system according to claim 6, wherein the switching function of the mobile service switching center can be directed at least a first state where the switching function branches telecommunications signals to be sent to the mobile station in the downlink direction so that the signals are supplied from the switching function further to both the base station employing the first telecommunications channel and the base station employing the second telecommunications channel, and where the switching function sums in the uplink direction the signals received from the mobile station by the base station transmitting the first telecommunications channel and the signals received from the mobile station by the base station transmitting the second telecommunications channel and forwards the summed signals, (col.5; 28-col.6; 47) and a second state where the switching function supplies telecommunications signals to be sent to the mobile station in the downlink direction only to the base station transmitting the second telecommunications channel and where the switching function supplies only signals received

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from the mobile station by the base station transmitting the second telecommunications channel further in the uplink direction. (col.5; 28-col.6; 47) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the process where the switching function of the mobile services switching center or the base station controller is directed to perform the handover in order to provide managing radio resources in inter-cell call handover system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is 703-308-4736. The examiner can normally be reached on Mon-Fri. (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Sharad Rampuria
October 1, 2004



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
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